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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,233	02/18/2004	William A. Simpson		1472

7590 12/01/2005  
William A. Simpson  
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EXAMINER

ROMAN, LUIS ENRIQUE

ART UNIT PAPER NUMBER

2836

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/780,233	Applicant(s) SIMPSON, WILLIAM A.	
	Examiner Luis Roman	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### Objections

#### *Specification*

The disclosure is objected to because of the following informalities: claim 1 recites a means in one of the limitations, which is not explained in the specifications. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 1** is rejected under 35 U.S.C. §103(a) as being unpatentable over Stewart (US 6538343) in view of Reedy (US 6914763).

Regarding to claim 1 Stewart discloses a method of disconnecting electrical load from an overloaded power system grid while maintaining part of the customers electrical circuits energized (col.2 lines 25-28), consisting of the following steps:

a) placing an on/off switch (Fig. 2 elements 62, 64) in either leg of the 240 volt circuit (Fig. 2 elements 78) of the 3 wire Fig. 2 elements 54, 56, 58), center tapped, grounded cable serving said customers (Fig. 2 elements 78, 80, 82, 84, 86, 88, etc.),

c) means (Fig. 2 elements 90) to open said on/off switch (Fig. 2 elements 62, 64), whereby the disconnecting of electrical load from said overloaded power system grid has been accomplished while maintaining part of said customers electrical circuits energized (Fig. 2 elements 50, 90 select the group of switches to open/close to keep the grid at reasonable power values to stay out of the unstable situation).

Stewart does not disclose the method b) providing a frequency meter to monitor the frequency of said power system grid, and to open the switches whenever said frequency meter indicates that the frequency of said overloaded power system grid has dropped to a point at which said overloaded power system grid is in danger of becoming unstable.

Reedy teaches the method b) providing a frequency meter (Fig. 1 elements 22, 23, 24) to monitor the frequency of said power system grid, and to open the switches whenever said frequency meter indicates that the frequency of said overloaded power system grid has dropped to a point at which said overloaded power system grid is in danger of becoming unstable (col.2 lines 41-49).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Stewart method/device with the Reedy method/device features because when arise the need for a grid operator to reduce or shutdown a distributed generation unit abruptly, yet in orderly manner, to prevent overloading of lines, over frequency, over voltage, or other conditions which can cause or exacerbate major system disruptions, it is very important to have accurate information about the grid state. This can be accomplished by a close measurement of the frequency in the crucial legs of the grid.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luis E. Román whose telephone number is (571) 272 – 5527. The examiner can normally be reached on Mon – Fri from 7:15 AM to 3:45 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from Patent Application Information Retrieval (PAIR) system.

Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luis E. Román  
Patent Examiner  
Art Unit 2836

LR/112205



PHUONG T. VU  
PRIMARY EXAMINER